|  |  |  |
| --- | --- | --- |
| **chemical-reactions** | **Chemistry** | **شعار-القسم** |
| Worksheet-8- |
| Reactivity Series(3) |

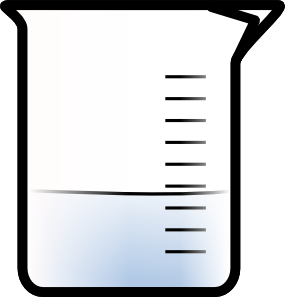
|  |  |
| --- | --- |
| Name: Class: 8 /……........ | |
| Book pages: | |
| 26 / 12 / 2011 | Date: |
| 8.13.3 – 8.13.4 | Core Standard number |
| *Sts. able to :*   1. ***Use*** *an indicator to show that a solution is basic or acidic.* 2. ***Demonstrate*** *that soluble metal oxides and metal hydroxides, formed when metals react with oxygen, water, give alkaline solution.* 3. ***Demonstrate*** *experimentally how to place Zinc and potassium in the reactivity series.* | Learning Objectives  Logo + text 2 |

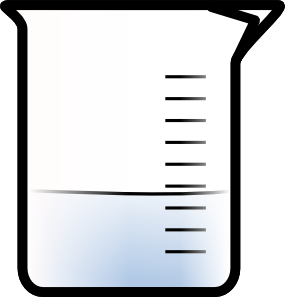
1. Set up the following experiments and dedude the character ( acidic or basic ) of calcium oxide and sodium hydroxide solutions.

Indicator: phenolphtalein

2

1





Sodium hydroxide solution

Calcium oxide solution

Record the colors obtained in each beakers and deduce the if they are acidic or basic solutions.

**Beaker 1:**

* Color: **pink**
* Character of the solution: **basic**

**Beaker 2:**

* Color: **pink**
* Character of the solution **basic**

**Conclusion :**

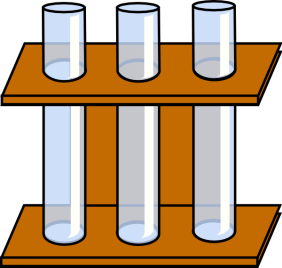
**Soluble metal oxides and metal hydroxides react with water and give alkaline solutions.**

1. Set up the following experiments and place Zinc in the reactivity series.

**3**

**2**

**1**



Tube 1: magnesium + hydrochloric acid

Tube 2: iron + hydrochloric acid

Tube 3: zinc + hydrochloric acid

Observe the reaction in each tubes and compare the reactivity between the three metals.

Mg> Zinc > Iron

Place Zinc in the following reactivity series

Na

Zn

Mg

Ca

Fe

Reactivity increase